

CFP Spring 2010 All-members

1:00-1:30 **Welcome and introduction to CFP**

Andy Lippman, MIT Media Lab

1:30-2:15 **Keynote address: The Future of Digital Media**

Scott Dinsdale, Sony Music Entertainment

2:15-3:00 **Redefining Television**

William Uricchio, Director, MIT Comparative Media Studies Program

3:00-3:15 Break

3:15-4:00 **Television Reloaded**

Charlie Fine, MIT Sloan School of Management

4:00-4:45 **After the Triple Play: Future Opportunities for Operators**

Dave Clark, MIT CSAIL

Social Information and Television

Andrew Lippman
Media Lab
lip@mit.edu
April, 2010



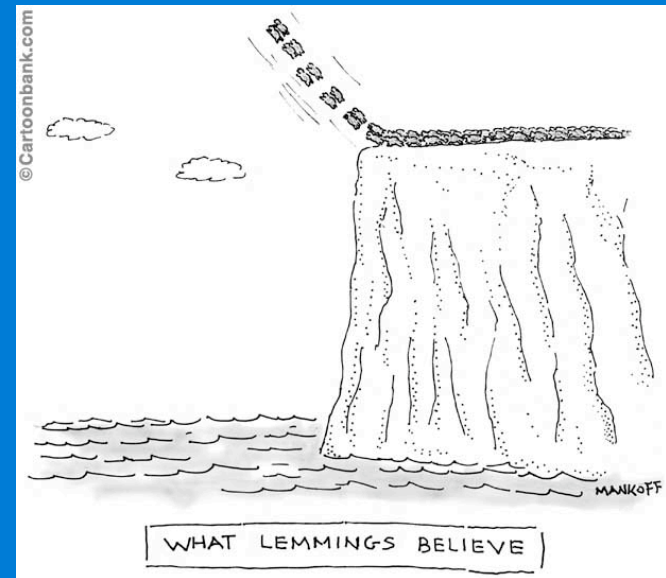
The CFP Approach

- CFP is about breadth and argument
- Functions through working groups
- Emphasis on value chain dynamics in a context of social and technical disruption
- Today television both because of importance *and* because it is a metaphor

Make the players into a team: Fine

Institutional cracks

- Out of scale
- Monocultures
- Opaque
- Blurred mission
- Presumed continuity



Solution: Invert each bit

Television Stability?

- 1884: Nipkow Disk, used through WWII
- 1900: Perkyi: "Television"
- 1904: Television: Hugo Gernsback
- 1920: Zworykin, Westinghouse
- 1923: Iconoscope, version 1
- 1928: Farnsworth, image dissector
- 1929: Baird broadcasts, Alexandra Palace
- 1935: Berlin Olympics
- 1939: NY World's Fair; image iconoscope
- 1940's: Dumont FSS TV
- 1943: Orthicon
- 1941-46: US broadcasts
- 1949: CATV
- 1950: CBS Color
- 1953: NTSC color
- 1955: Ampex videotape
- 1958: Videogame, Brookhaven
- 1962: Phonevision, PayTV
- 1962: Spacewar, MIT
- 1965: Sony 1/2 helical tape, \$3000
- 1969: RCA selectavision player
- 1972: HBO
- 1975: Satellite HBO, PONG (Atari)
- 1975: Betamax
- 1976: Teletext, BBC, WTBS (name from MIT in 1979)
- 1977: CUBE
- 1978: Videodisc
- 1980: Addressable Converter
- 1991: MPEG



Ad revenue

- Internet is 17 percent of overall ad revenue (TV, radio, newspapers, consumer magazines.) Up from 8 percent in 2005 (AP, 8 April, 2010)
- Google 2009 = \$23Billion (Annual report)
- Network TV down 9.9%; all TV down 9%
- Spanish Language cable up 32.2%

Television Viewing

- The typical American continues to increase his/her media time, watching each week almost 35 hrs of TV, 2 hrs of timeshifted TV, 22 minutes of online video and 4 minutes of mobile video, while also spending 4 hours on the internet.
- In addition, Americans now spend 35% more time using the Internet and TV simultaneously than they were a year ago – now spending up to 3.5 hours each month surfing the Internet and watching TV at the same time.”

Neilsen, Q4, 2009

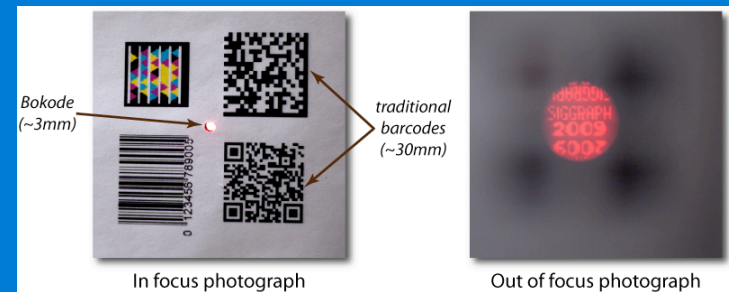
Television Viewing: Nature

- Average video length viewed is 2 1/2 minutes long. (10 minute limit except for partners) (Chad Hurley, 2006)
- 6 Million pictures on Flickr; 300,000 “I ate this.” Nikon, Olympus, Sony and Fuji have “cuisine” settings. (NYTimes, 4/6/10)
- Image tagging is a new story, Von Ahn



Television Imaging Technology

- Headlight to spotlight converter
- Data in the image/optical networking
- Blur insertion/NPR/Range
- BiDi Screen
- Imperceptible structured light
- 3D/non-3D
- Bokode



Media.mit.edu/~Raskar

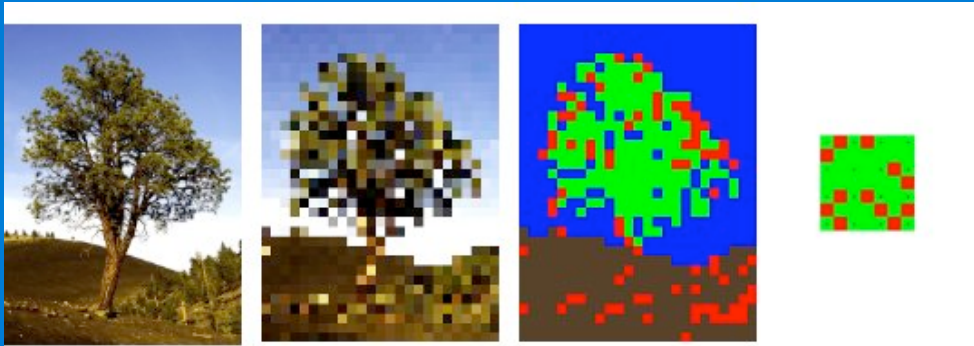
Television Viewing: past 3D

- Multiple feeds – multiple views
- Holographic television

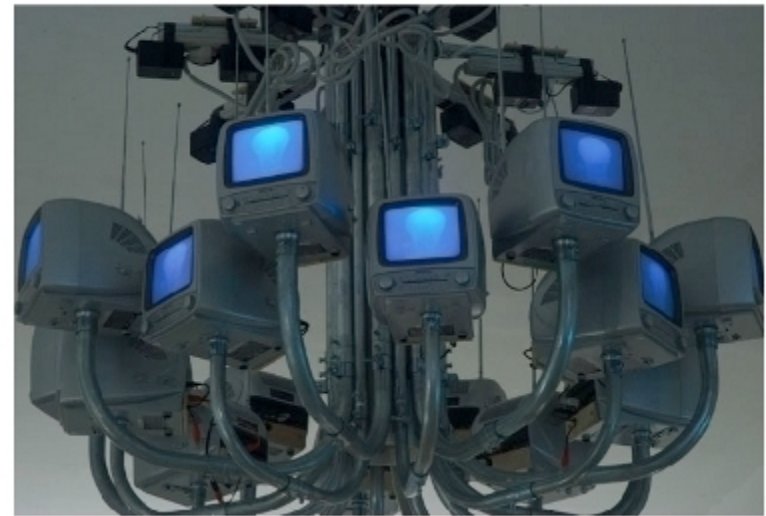
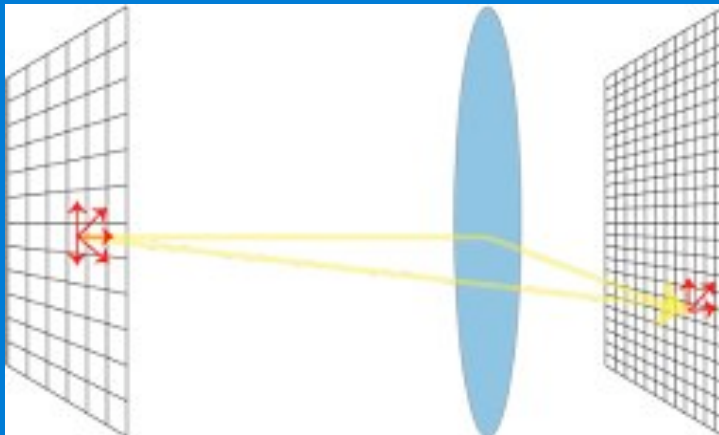


Bove, 2010

Television Viewing: Optical Data



URNS



Grace Woo, 2010

Interpreting the day

- It's about stories
- It's about light
- It's about opportunity



BT LABORATORY FOR A CONNECTED WORLD



Tangible Media
Hiroshi Ishii
JB LaBruno, Leo Ronconi, Cati Vascule, Sean Fallmer, Daniel Leithinger, Kato Yoko, John Lee, Keywon Chung



Viral Communications
Andy Lippman
David Reed, Kwang Lee, David Shan, Grace Woo, Polychronis Ypodimitopoulos, Boris Kozabitskiy, Inna Kopyak



Design Ecology
David Small
Agnus Chan, Richard The, Jeffery Warren

MORE About

We define Design Ecology as the study of malleable design that is aware of and can seamlessly react to changing environments. While traditional design methods focus on single products and users, we believe that looking at the interplay between multiple people and multiple devices will yield significant results. To this end, we create visual communication that incorporates new display and computational technologies, novel software techniques, and perceptual and cognitive issues.

FEATURED PROJECT

Cartagen
Cartagen is a set of tools for mapping, enabling users to view and configure live streams of geographic data as a dynamic, personally relevant way. Today's mapping software is largely based on static data sets and neither incorporates the time dimension in its display nor provides for real-time data streams. Cartagen, built for iPhone and Android platforms, helps users to analyze and view shared geodata from multiple sources. Cartagen is a dynamic map-renderer which employs Geographic Style Sheets (GSS), a cascading style-sheet specification for geospatial information's decision which keeps history in CSS to make mapping more accessible. However, GSS is a scripting language as well, making Cartagen an ideal framework for mapping dynamic data. Applications include mapping real-time air pollution, citizen reporting, and disaster

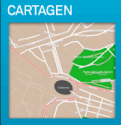


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CITYCAR

The CityCar electric automobile, developed and prototyped by Smart Cities, is designed to meet the demand for enclosed personal mobility – with weather protection, climate control and comfort, secure storage, and crash protection – in the cleanest and most economical way possible. It weighs less than a thousand pounds, parks in much less space than a Smart Car, and is expected to get the equivalent of 150 to 200 miles per gallon of gasoline.

[PLAY DEMO](#)

[SAVE FOR LATER](#)

[OTHER RELATED WORK](#)



THE FUTURE OF TRANSPORTATION
Mar 21, 4 PM
E14 6th floor

EXPLORING PROJECTS, PEOPLE, EVENTS RELATED TO **CITYCAR**



BT LABORATORY



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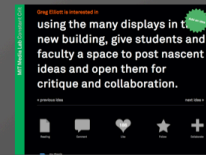
Information Ecology

Henry Holtzman
David Carr, Greg Elliott, Matt Hirsch, John Kestner, Reed Martin

MORE About

We have become reliant on digital information for communication, commerce, and entertainment. This information needs to be always available, whether stored locally on our computers, on enterprise servers at work, or via third-party services like Gmail. Most importantly, we should have choices beyond desktop computers or smartphones to access it. The Information Ecology group explores ways to connect our physical environments with information resources. Through the use of low-cost, ubiquitous technologies such as sensors and consumer electronics, we are creating seamless and pervasive ways to interact with our information and with each other.

FEATURED PROJECT ConstantCrit



ConstantCrit encourages MediaLab researchers to post their work in its earliest form - as a concise one to two sentence statement. The system then displays these ideas throughout the Media Lab, offering others a chance to critique the work by suggesting readings and comments. It also offers a way for others to simply 'like' a project, or go further and follow it or collaborate with the author.



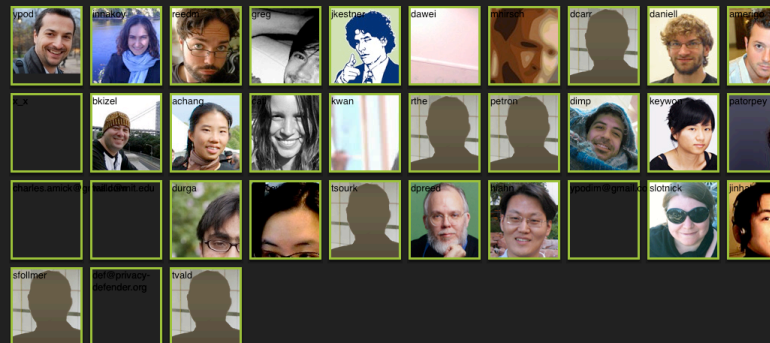
Tangible Media

Hiroshi Ishii
Leonardo Bonanni, Keywon Chung, Sean Follmer, Jean-Baptiste Labrune, Jinha Lee, Daniel Leithinger, Cati Vaucelle, Xiao Xiao



Viral Communications

Andrew Lippman
Boris Kizelshteyn, Kwan Hong Lee, Dawei Shen, Grace Woo, Polychronis Ypodimatopoulos



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MORE

About

We live between two worlds: our physical environment and cyberspace. The Tangible Media group's focus is on the design of seamless interfaces between humans, digital information, and the physical environment. People have developed sophisticated skills for sensing and manipulating our physical environments. However, most of these skills are not employed by traditional GUIs (Graphical User Interfaces). The Tangible Media group is designing a variety of "tangible interfaces" based on these skills by giving physical form to digital information.

FEATURED PROJECT

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Beyond - Collapsible Tools and Gestures for Computational Design



Beyond is an interface for design where users can directly manipulate digital media with physically retractable tools and natural hand gestures. When pushed onto the screen, these tools can physically collapse and project themselves onto the screen, letting users perceive as if they are inserting tools into the digital space beyond the screen. Our aim is to make the digital 3-D design process straightforward, scalable and more accessible to

general users by extending physical affordances and inherent senses of 3-D space beyond the computer screen.

Add for iPad
Add for iPhone



Viral Communications

Andrew Lippman
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Touch displays provided by Samsung Electronics Co., Ltd.